

### **Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

### **Listing of Claims:**

1. (Currently amended)                      A method of communicating broadcast information comprising the steps of:
- a) receiving, at a transmission scheduler, a request from a first user device for digital broadcast information and causing a server to communicate a first stream representing digital broadcast information to said first user device in response to instructions from said transmission scheduler wherein said server and said first user device are coupled to the Internet;
  - b) receiving, at said transmission scheduler, a request from a second user device for digital broadcast information and causing said server to communicate a second stream representing said digital broadcast information to said second user device in response to instructions from said transmission scheduler wherein said second user device is coupled to the Internet;
  - c) receiving, at said transmission scheduler, a request from a third user device for digital broadcast information and causing said first user device to communicate a third stream representing said digital broadcast information to said third user device in response to instructions from said transmission scheduler wherein said third user device is coupled to the Internet;
  - d) receiving and rendering, concurrently, said digital broadcast information on said first, second and third user devices, wherein said user devices form one or more communication chains, wherein each communication chain has one or

more tiers, and wherein a sum of user devices in corresponding tiers of said communication chains is variable; and

e) for each user device, registering with and periodically sending status update messages to said transmission scheduler that is separate from said server and said user devices, ~~wherein said transmission scheduler actively monitors, manages, and initiates failure-based and performance-based changes in said communication chains among said server and said user devices; and~~

f) at said transmission scheduler, using said status update messages to initiate changes in said communication chains among said server and said user devices to provide active monitoring and managing functionality.

2. (Original)            A method as described in Claim 1 wherein said broadcast information is a radio program.

3. (Original)            A method as described in Claim 1 wherein said broadcast information is a television program.

4. (Original)            A method as described in Claim 1 wherein said broadcast information is a computer program.

5. (Currently Amended)            A method as described in Claim 1 further comprising the step of [[f]] g) in response to said first user device shutting down, causing said second user device to communicate a fourth stream representing said broadcast information to said third user device.

6. (Original)            A method as described in Claim 1 further comprising the steps of:  
adding a fourth user device on said Internet; and  
causing said second user device to communicate a fourth stream representing said broadcast information to said fourth user device.

7. (Original)            A method as described in Claim 1 further comprising the steps of:  
adding a fourth user device on said Internet; and  
causing said server to communicate a fourth stream representing said broadcast information to said fourth user device.

8. (Currently amended)            A method of broadcasting information over a network of electronic devices, said method comprising the steps of:  
receiving, at a transmission scheduler, a request from a first group of electronic devices for broadcast information and transmitting broadcast information from a server to said first group of electronic devices of said network in response to instructions from said transmission scheduler;  
receiving, at said transmission scheduler, a request from a second group of electronic devices for broadcast information and achieving broadcasting of said broadcast information for said first group and said second group of electronic devices by forwarding said broadcast information from said first group of electronic devices to said second group of electronic devices of said network in response to instructions from said transmission scheduler such that said first and second groups of electronic devices receive and render, concurrently, said broadcast information, wherein said electronic devices form one or more communication chains, wherein each communication chain has one or more

tiers, and wherein a sum of electronic devices in corresponding tiers of said communication chains is variable; and

for each electronic device, registering with and periodically sending status update messages to said transmission scheduler that is separate from said server and said electronic devices, ~~wherein said transmission scheduler actively monitors, manages, and initiates failure-based and performance-based changes in said communication chains among said server and said electronic devices;~~  
and

at said transmission scheduler, using said status update messages to initiate changes in said communication chains among said server and said electronic devices to provide active monitoring and managing functionality.

9. (Previously presented)      The method as recited in Claim 8 wherein said step of achieving broadcasting further comprises the steps of:  
establishing direct communication links between respective ones of said first group of electronic devices and said second group of electronic devices;  
and  
instructing said first group of electronic devices to transmit said broadcast information to said second group of electronic devices via said direct communication links.

10. (Original)      The method as recited in Claim 9 further comprising the step of periodically updating status of said first and second groups of electronic devices.

11. (Original) The method as recited in Claim 10 further comprising the step of by-passing inactive electronics devices of said first group by re-routing said direct communication links.

12. (Original) The method as recited in Claim 10 further comprising the step of terminating direct communications links that are associated with inactive electronic devices of said first and said second group.

13. (Original) The method as recited in Claim 8 wherein said first and second groups of electronic devices each comprises a computer system configured for receiving said broadcast information and for forwarding said broadcast information.

14. (Original) The method as recited in Claim 8 wherein said network of electronic devices comprises the Internet.

15. (Currently amended) A method of communicating broadcast information comprising the steps of:

a) receiving, at a transmission scheduler, a request from a first user device for broadcast information and communicating a first digital stream to said first user device, said first digital stream representing broadcast information, said step a) performed by a server in response to instructions from said transmission scheduler and wherein said server and said first user device are coupled to the Internet;

b) receiving, at said transmission scheduler, a request from a second user device for broadcast information and communicating a second digital stream to said second user device, said second digital stream representing

said broadcast information, said step b) performed by said server in response to instructions from said transmission scheduler and wherein said second user device is coupled to the Internet;

c) receiving, at said transmission scheduler, a request from a third user device for broadcast information and communicating a third digital stream to said third user device, said third digital stream representing said broadcast information, said step c) performed by said first user device in response to instructions from said transmission scheduler wherein said third user device is coupled to the Internet;

d) receiving and rendering, concurrently, said broadcast information on said second and third user devices, wherein said user devices form one or more communication chains, wherein each communication chain has one or more tiers, and wherein a sum of user devices in corresponding tiers of said communication chains is variable; and

e) for each user device, registering with and periodically sending status update messages to said transmission scheduler that is separate from said server and said user devices, ~~wherein said transmission scheduler actively monitors, manages, and initiates failure-based and performance-based changes in said communication chains among said server and said user devices; and~~

f) at said transmission scheduler, using said status update messages to initiate changes in said communication chains among said server and said user devices to provide active monitoring and managing functionality.

16. (Original) A method as described in Claim 15 wherein said broadcast information is an audio program.

17. (Original) A method as described in Claim 15 wherein said broadcast information is a visual program.

18. (Original) A method as described in Claim 15 wherein said broadcast information is a radio program.

19. (Original) A method as described in Claim 15 wherein said broadcast information is a computer program.

20. (Currently Amended) A method as described in Claim 15 further comprising the step of [[f]] g) in response to said first user device shutting down, causing said second user device to communicate a fourth digital stream representing said broadcast information to said third user device.

21. (Original) A method as described in Claim 15 further comprising the step of communicating a fourth digital stream representing said broadcast information to a fourth user device, said step of communicating a fourth digital stream performed by said second user device.

22. (Original) A method as described in Claim 15 further comprising the step of communicating a fourth digital stream representing said broadcast information to a fourth user device, said step of communicating a fourth digital stream performed by said first user device.

23. (Original) A method as described in Claim 15 further comprising the steps of:

communicating a fourth digital stream representing said broadcast information to a fourth user device, said step of communicating a fourth digital stream performed by said third user device; and

said fourth user device rendering said broadcast information thereon.

24. (Currently amended) A system for communicating broadcast information comprising:

a transmission scheduler for receiving requests from user devices for broadcast information;

a server configured to communicate a first digital stream to a first user device in response to instructions from said transmission scheduler, said first digital stream representing broadcast information and wherein said server and said first user device are coupled to the Internet;

said server also configured to communicate a second digital stream to a second user device in response to instructions from said transmission scheduler, said second digital stream representing said broadcast information and wherein said second user device is coupled to the Internet;

said first user device configured to communicate a third digital stream to a third user device in response to instructions from said transmission scheduler, said third digital stream representing said broadcast information and wherein said third user device is coupled to the Internet; and

said second and said third user devices also for receiving and rendering, concurrently, said broadcast information, wherein said user devices form one or more communication chains, wherein each communication chain has one or more tiers, and wherein a sum of user devices in corresponding tiers of said communication chains is variable, wherein



~~\_\_\_\_\_said transmission scheduler is configured for actively monitoring, managing, and initiating failure-based and performance-based changes in said communication chains among said server and said user devices, and wherein~~  
each user device registers with and periodically sends status update messages to said transmission scheduler that is separate from said server and said user devices, and wherein said transmission scheduler is configured to use said status update messages to initiate changes in said communication chains among said server and said user devices to provide active monitoring and managing functionality.

25. (Previously Presented) A system as described in Claim 24 wherein said transmission scheduler further coupled to the Internet and for scheduling and maintaining communication links between said server, said first user device, said second user device and said third user device.

26. (Original) A system as described in Claim 25 wherein said first, second and third user devices register with said transmission scheduler before receiving said broadcast information.

27. (Original) A system as described in Claim 24 wherein said broadcast information is an audio program.

28. (Original) A system as described in Claim 24 wherein said broadcast information is a visual program.

29. (Original) A system as described in Claim 24 wherein said broadcast information is a radio program.

30. (Original) A system as described in Claim 24 wherein said broadcast information is a computer program.

31. (Original) A system as described in Claim 25 wherein said transmission scheduler, in response to said first user device shutting down, is for causing said second user device to communicate a fourth digital stream representing said broadcast information to said third user device.

32. (Original) A system as described in Claim 25 further comprising a fourth user device registering with said transmission scheduler and wherein said second user device is configured to communicate a fourth digital stream representing said broadcast information to said fourth user device.

33. (Original) A system as described in Claim 25 further comprising a fourth user device registering with said transmission scheduler and wherein said first user device is configured to communicate a fourth digital stream representing said broadcast information to said fourth user device.

34. (Original) A system as described in Claim 25 further comprising a fourth user device registering with said transmission scheduler and wherein said third user device is configured to communicate a fourth digital stream representing said broadcast information to said fourth user device and wherein said fourth user device is for rendering said broadcast information thereon.

35. (Currently amended) A system for communicating broadcast information comprising:

a transmission scheduler for receiving requests from user devices for broadcast information;

a server configured by said transmission scheduler to communicate a first digital stream to a first user device in response to said transmission scheduler receiving a request for said broadcast information from said first user device, said first digital stream representing broadcast information and wherein said server and said first user device are coupled to the Internet;

said server also configured by said transmission scheduler to communicate a second digital stream to a second user device in response to said transmission scheduler receiving a request for said broadcast information from said second user device, said second digital stream representing said broadcast information and wherein said second user device is coupled to the Internet; and

said first user device configured by said transmission scheduler to communicate a third digital stream to a third user device in response to said transmission scheduler receiving a request for said broadcast information from said third user device, said third digital stream representing said broadcast information and wherein said third user device is coupled to the Internet, and

wherein said second and said third user devices are also for receiving and rendering, concurrently, said broadcast information, and wherein said user devices form one or more communication chains, wherein each communication chain has one or more tiers, and wherein a sum of user devices in corresponding tiers of said communication chains is variable, and wherein

~~—— said transmission scheduler is configured for actively monitoring, managing, and initiating failure-based and performance-based changes in said communication chains among said server and said user devices, and wherein~~

each user device registers with and periodically sends status update messages to said transmission scheduler that is separate from said server and said user devices, and

wherein said transmission scheduler schedules and maintains communication links between said server, said first user device, said second user device and said third user device to transmit said broadcast information, and wherein said transmission scheduler is configured to use said status update messages to initiate changes in said communication chains among said server and said user devices to provide active monitoring and managing functionality.

36. (Original) A system as described in Claim 35 wherein said first, second and third user devices register with said transmission scheduler before receiving said broadcast information.

37. (Original) A system as described in Claim 35 wherein said broadcast information is an audio program.

38. (Original) A system as described in Claim 35 wherein said broadcast information is a visual program.

39. (Original) A system as described in Claim 35 wherein said broadcast information is a radio program.

40. (Original) A system as described in Claim 35 wherein said broadcast information is a computer program.

41. (Original) A system as described in Claim 35 wherein said transmission scheduler, in response to said first user device shutting down, is for causing said second user device to communicate a fourth digital stream representing said broadcast information to said third user device.

42. (Original) A system as described in Claim 36 further comprising a fourth user device registering with said transmission scheduler and wherein said second user device is configured by said transmission scheduler to communicate a fourth digital stream representing said broadcast information to said fourth user device.

43. (Original) A system as described in Claim 36 further comprising a fourth user device registering with said transmission scheduler and wherein said first user device is configured by said transmission scheduler to communicate a fourth digital stream representing said broadcast information to said fourth user device.

44. (Original) A system as described in Claim 36 further comprising a fourth user device registering with said transmission scheduler and wherein said third user device is configured by said transmission scheduler to communicate a fourth digital stream representing said broadcast information to said fourth user device and wherein said fourth user device is for rendering said broadcast information thereon.